



TILT-UP BRACE LOAD CHART

TECHNICAL DATA SHEET

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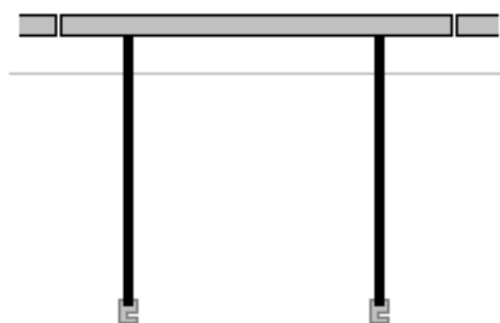


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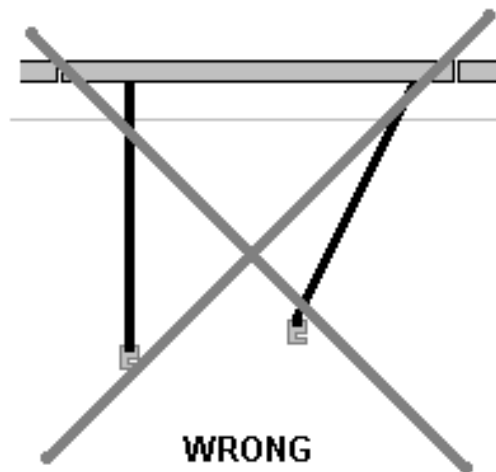
Tilt-Up Brace Safe Application Notes:

- Load ratings in these charts are without knee bracing only. Consult your engineering department for loads with knee bracing.
- All braces must be installed at least 2'-0" above the panel's center of gravity.
- Braces must be installed at a 90° angle to plane of panel for maximum load rating.



RIGHT

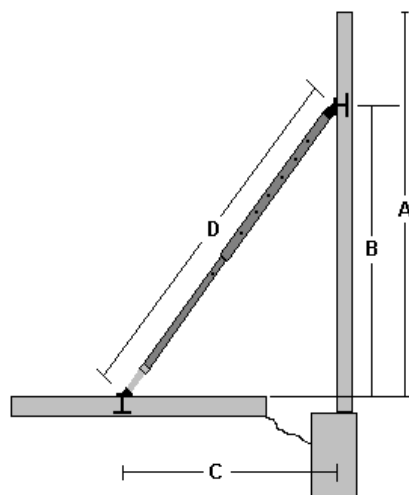
Plan View



WRONG

Recommended Bracing Dimensions:

- A = Panel Height above finished floor
- B = Wall brace insert dimension
- C = Floor brace insert dimension
- D = Brace length



Brace locations other than those shown may reduce the brace's Safe Working Load drastically! Brace angles over 60° from the horizontal result in poor mechanical advantage and excessive vertical kick, while braces under 50° decrease brace buckling strength due to greater length and excessive sag.





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D-1 Tilt-Up Brace

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A	B	C	D	Safe Working Load Without Knee Bracing
12'-0"	6'-9"	5'-1"	8'-5"	6,500 lbs.
13'-0"	8'-0"	6'-0"	10'-0"	6,450 lbs.
14'-0"	9'-1"	6'-7"	11'-5"	5,225 lbs.
15'-0"	10'-5"	7'-10"	13'-0"	4,450 lbs.
16'-0"	11'-6"	8'-7"	14'-5"	3,750 lbs.
APPROX. SAFE WORKING LOAD = 1.5:1				

D-4 Tilt-Up Brace

D-4 Tilt-Up Brace				
A	B	C	D	Safe Working Load Without Knee Bracing
18'-0"	12'-0"	9'-0"	15'-0"	6,500 lbs.
19'-0"	12'-8"	9'-6"	15'-10"	6,500 lbs.
20'-0"	13'-4"	10'-0"	16'-8"	6,500 lbs.
21'-0"	14'-0"	10'-6"	17'-6"	5,925 lbs.
22'-0"	14'-8"	11'-0"	18'-4"	4,800 lbs.
23'-0"	15'-4"	11'-6"	19'-2"	3,925 lbs.
24'-0"	16'-0"	12'-0"	20'-0"	3,575 lbs.
25'-0"	16'-8"	12'-6"	20'-10"	2,975 lbs.
26'-0"	17'-4"	13'-0"	21'-6"	2,500 lbs.
27'-0"	18'-0"	13'-6"	22'-6"	2,275 lbs.
28'-0"	18'-8"	14'-0"	23'-4"	1,950 lbs.
APPROX. SAFE WORKING LOAD = 1.5:1				





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D-5 Tilt-Up Brace

D-5 Tilt-Up Brace				
A	B	C	D	Safe Working Load Without Knee Bracing
27'-0"	18'-0"	13'-6"	22'-6"	5,975 lbs.
28'-0"	18'-8"	14'-0"	23'-4"	5,325 lbs.
29'-0"	19'-4"	14'-6"	24'-2"	4,800 lbs.
30'-0"	20'-0"	15'-0"	25'-0"	4,250 lbs.
31'-0"	20'-8"	15'-6"	25'-10"	3,450 lbs.
32'-0"	21'-4"	16'-0"	26'-8"	2,825 lbs.
33'-0"	22'-0"	16'-6"	27'-6"	2,550 lbs.
34'-0"	22'-8"	17'-0"	28'-4"	2,100 lbs.
35'-0"	23'-4"	17'-6"	29'-2"	1,750 lbs.
36'-0"	24'-0"	18'-0"	30'-0"	1,600 lbs.
37'-0"	24'-8"	18'-6"	30'-10"	1,350 lbs.
38'-0"	25'-4"	19'-0"	31'-8" ^{**}	Not Recommended
39'-0"	26'-0"	19'-6"	32'-6" ^{**}	Not Recommended
40'-0"	26'-8"	20'-0"	33'-4" ^{**}	Not Recommended
41'-0"	27'-4"	20'-6"	34'-2" ^{**}	Not Recommended
42'-0"	28'-0"	21'-0"	35'-0" ^{**}	Not Recommended
43'-0"	28'-8"	21'-6"	35'-10" ^{**}	Not Recommended
44'-0"	29'-4"	22'-0"	36'-8" ^{**}	Not Recommended
45'-0"	30'-0"	22'-6"	37'-6" ^{**}	Not Recommended
46'-0"	30'-8"	23'-0"	38'-4" ^{**}	Not Recommended
47'-0"	31'-4"	23'-6"	39'-0" ^{**}	Not Recommended
APPROX. SAFE WORKING LOAD = 1.5:1				

****Although the maximum length is 39'-0"**, a Knee Brace is required over 30'-10"





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D-8, D-9, D-10 Tilt-Up Brace

D-8, D-9, & D-10 Tilt-Up Brace					
Brace	A	B	C	D	Safe Working Load without Knee Bracing
D-8	20'-0" to 30'-0"	17'-6"	13'-3"	22'-0"	6,770 lbs.
D-9	25'-0" to 31'-0"	21'-6"	16'-3"	27'-0"	5,300 bs.
D-10	31'-0" to 44'-0"	25'-6"	19'-3"	32'-0"	3,600 lbs.
APPROX. SAFE WORKING LOAD = 1.5:1					

D-12, D-14, D-15, D-16 Tilt-Up Brace

D-12, D-14, D-15, D-16 Tilt-Up Brace					
Brace	A	B	C	D	Safe Working Load without Knee Bracing
D-12	27'-0" to 46'-0"	25'-6"	19'-4"	32'-0"	9,000 lbs.
D-14	35'-0" to 60'-0"	33'-6"	25'-4"	42'-0"	5,200lbs.
D-15	43'-0" to 60'-0"	41'-6"	31'-4"	52'-0"	3,800 lbs.
D-16	42'-0"	29'-6"	22'-4"	37'-0"	8,000 lbs.
APPROX. SAFE WORKING LOAD = 1.5:1					





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 **DANGER**

**DO NOT REMOVE OR RELEASE ANY
BRACE OR BRACING ELEMENT UNTIL
ALL STRUCTURAL CONNECTIONS
ARE COMPLETED**



Detaching, moving or removing this brace may cause injury or death. Consult the structural engineer of record before attempting to detach, move or remove this brace. The panel must be permanently connected to the roof and adjacent panels and appropriate structural components including the floor slab or foundation before detaching any brace connection. Read, understand and follow the information in the Erection Details Book for the project and in the TCA Tilt-Up Design and Construction Manual.

Any questions or requests for additional information may be directed to Spectrum Concrete Products: Chino, CA (909) 590-0066.

 **PELIGRO**

**NO QUITE NI DESPRENDA LOS
CONTRAVIENTOS HASTA QUE TODAS
LAS CONEXIONES ESTRUCTURALES SE
HAYAN HECHO Y ESTEN COMPLETAS**

Desprender, cambiar o quitar este contraviento puede causar un accidente o la muerte. Si tienen que cambiar o quitar los contravientos consulte el ingeniero de la obra. El panel debe de tener las conexiones apropiadas como al firme, techo y otros paneles antes de desprender los contravientos. Lea, comprenda y siga la información del libro de izaje detallado por para la obra y en el manual de diseño y construcción de TCA Tilt-Up.

Si tiene preguntas o si requiere mas información llame al departamento de servicios técnicos de Spectrum Concrete Products. En Chino, CA (909) 590-0066.

www.spectrumconcreteusa.com

All SCP Tilt-Up Braces should display this warning label.

Please contact our customer service department for additional labels if yours are faded or missing.

